



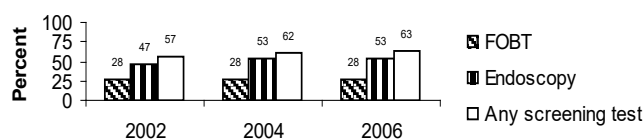
## PREVENTION OPPORTUNITIES UNDER THE BIG SKY

### Assessing Colorectal Cancer Screening Options

Colorectal cancer is an ideal candidate for population-based screening programs: It is relatively common (the third most common cancer in Montana after prostate and lung for men and breast and lung for women); and morbidity and mortality can be substantially reduced through safe and effective screening tests that either prevent colorectal cancer or find it at an early stage.

The newest evidence-based guidelines<sup>1,2</sup> agree that all adults between the ages of 50 and 75 years at average risk should be systematically screened. Between the ages of 76 and 85 years, screening should be considered on an individual basis. Screening may be discontinued after age 85 years. Individuals at higher than average risk by virtue of family or personal medical history should begin screening earlier and at more frequent intervals. Only 63% of Montana adults age 50 and older were current on any form of colorectal cancer screening in 2006, and screening participation rates have not increased in the past five years.<sup>3</sup> (Figure)

Figure: Colorectal cancer screening in adults  $\geq 50$ , Montana, 2002-2006\*



\*Montana Behavioral Risk Factor Survey

**The Burden of Colorectal Cancer in Montana** Each year approximately 475 new cases of colorectal cancer are diagnosed among Montana residents, and 175 people die from it.<sup>4</sup> Perhaps 80% of these deaths, and many of the incident cases, could be prevented by screening and the removal of precancerous polyps and other lesions. More than 95% of patients whose colorectal cancer is diagnosed at the local stage survive for five or more years after diagnosis, compared to only 15% whose cancer is diagnosed at the distant stage.

**Colorectal Cancer Screening Modalities** There are two general categories of colorectal cancer screening tests: non-invasive stool tests that generally detect existing cancer, but ideally at an early stage; and direct examination tests of varying degrees of invasiveness that inspect part or all of the colon and have the potential to prevent cancer by detecting and removing polyps and other precancerous lesions.

The authors of the 2008 guidelines prefer direct inspection methods that have the potential to prevent cancer over stool tests that find existing cancer.<sup>1,2</sup> However, they recognize that some patients are unwilling or unable to participate in direct examination

procedures. Personal preference, cost and inadequate health care coverage, and limited access to specialized screening facilities will continue to be barriers for some patients. All adults between the ages of 50 and 75 years at average risk of colorectal cancer should participate in some form of systematic screening.

#### Recommended Screening Strategies include

##### Direct examination of colon

- Colonoscopy every 10 years
- Flexible sigmoidoscopy every 5 years, with or without annual stool tests
- Double contrast barium enema every 5 years
- Computed tomographic colonography every 5 years

##### Stool tests

- Guaiac-based fecal occult blood test annually
- Fecal immunochemical test annually
- Stool DNA test annually

Colonoscopy provides the most direct assessment of the presence of cancer or precancerous lesions and polyps in the entire colon and has the potential for preventing colorectal cancer. Stool tests may be more acceptable than direct examination procedures for some patients but should be offered with stringent caveats. Providers should offer only those brands of tests with demonstrated high sensitivity. Although even the most sensitive stool tests appear to be between 50% and 80% sensitive as a single test, their performance in consistent annual testing programs compares favorably to colonoscopy -- 95% -- in the early detection of cancer. Patients must be willing to comply with annual testing if they choose stool tests.

Providers should have an office system to remind patients about the need for annual testing and to follow up positive stool test results. Positive results should be followed up with colonoscopy, not a second stool test. All adults should be screened for colorectal cancer according to the guidelines. The choice of a screening test must be made after consideration of individual

circumstances and preferences. No patient should be made to feel that direct examination tests are the only worthwhile options. If a patient cannot or will not have a direct examination screening, stool tests can and should be recommended with appropriate counseling about the importance of annual testing.

## Recommendations:

- Several screening strategies have demonstrated efficacy in reducing colorectal cancer morbidity and mortality.
- Every eligible patient should be encouraged to adhere to one of the recommended screening strategies.
- Stool tests have excellent sensitivity to detect colorectal cancer but only if patients adhere to regular annual testing.
- Direct examination tests can prevent cancer but are more invasive and more expensive than stool tests.
- All adults between the ages of 50 and 75 years at average risk for colorectal cancer should be screened regularly according to one of the recommended strategies.
- Screening for adults at average risk between the ages of 76 and 85 should be considered on a case-by-case basis.
- Colorectal cancer screening may be discontinued after age 85 years for individuals at average risk.
- Individuals at higher than average risk due to family history or personal medical history should begin screening earlier and may need to be screened more often.

For more information about this report and cancer in Montana, contact Carol Ballew, PhD, Epidemiologist, Cancer Control Program, at (406) 444-6988 or email at [cballew@mt.gov](mailto:cballew@mt.gov).

### References:

1. US Preventive Services Task Force. 2008. *Screening for Colorectal Cancer. Recommendation Statement*. [www.ahrq.gov/clinical/uspstf08/colocancer/colors/htm](http://www.ahrq.gov/clinical/uspstf08/colocancer/colors/htm)
2. Levin B et al. Screening and Surveillance for the early detection of colorectal cancer and adenomatous polyps, 2008: A joint guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology. *CA A Cancer Journal for Clinicians* 2008;58:130-160.
3. Montana Behavioral Risk Factor Surveillance System, 2006.
4. Montana Central Tumor Registry Annual Report, 2008. [www.cancer.mt.gov](http://www.cancer.mt.gov)

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